

4.2.A. 0513010601.

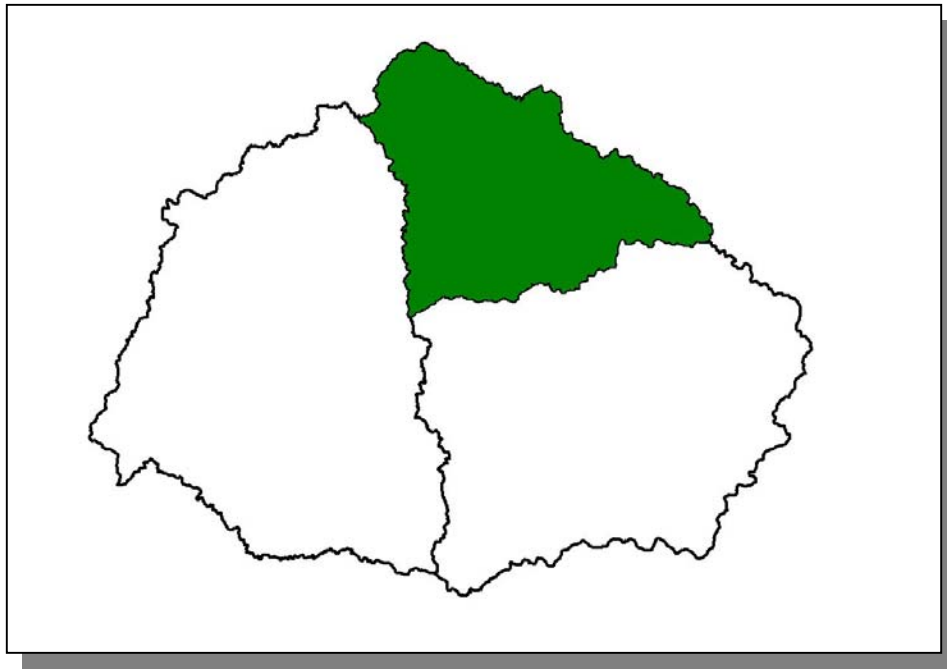


Figure 4-2. Location of Subwatershed 0513010601. All Cordell Hull Lake HUC-10 subwatershed boundaries are shown for reference.

4.2.A.i. 051301060101 (Cumberland River).

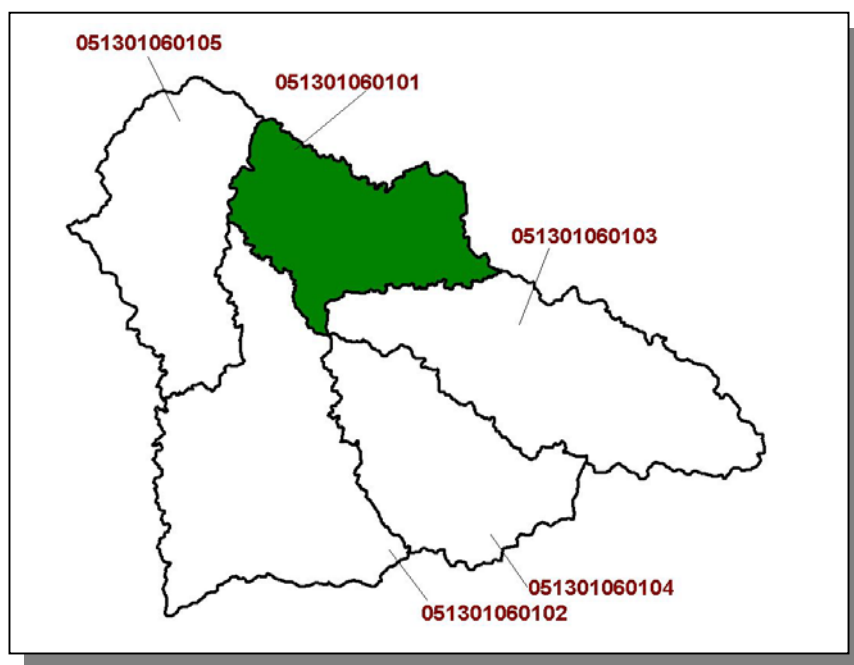


Figure 4-3. Location of Subwatershed 051301060101. All Clear Fork of the Cumberland River Watershed HUC-12 subwatershed boundaries are shown for reference.

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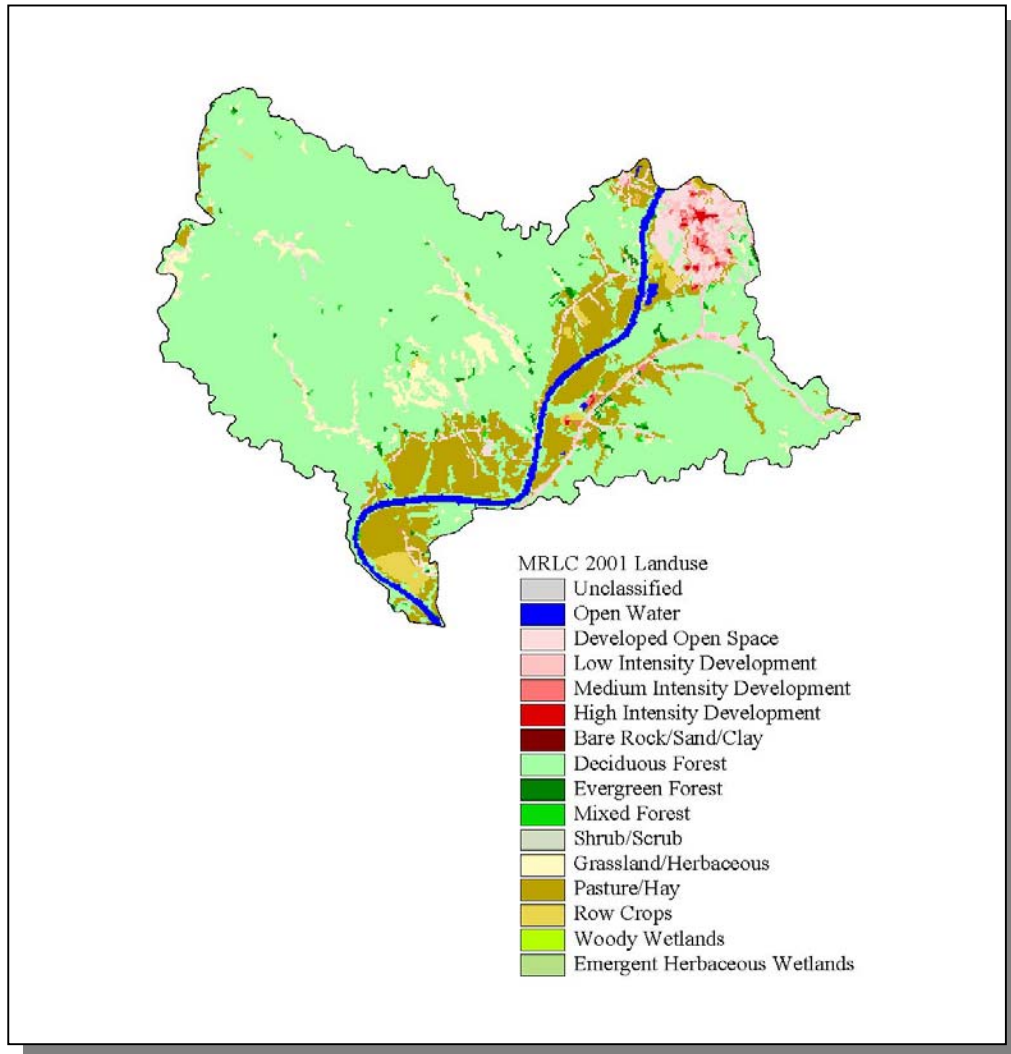


Figure 4-4. Illustration of Land Use Distribution in Subwatershed 051301060101.

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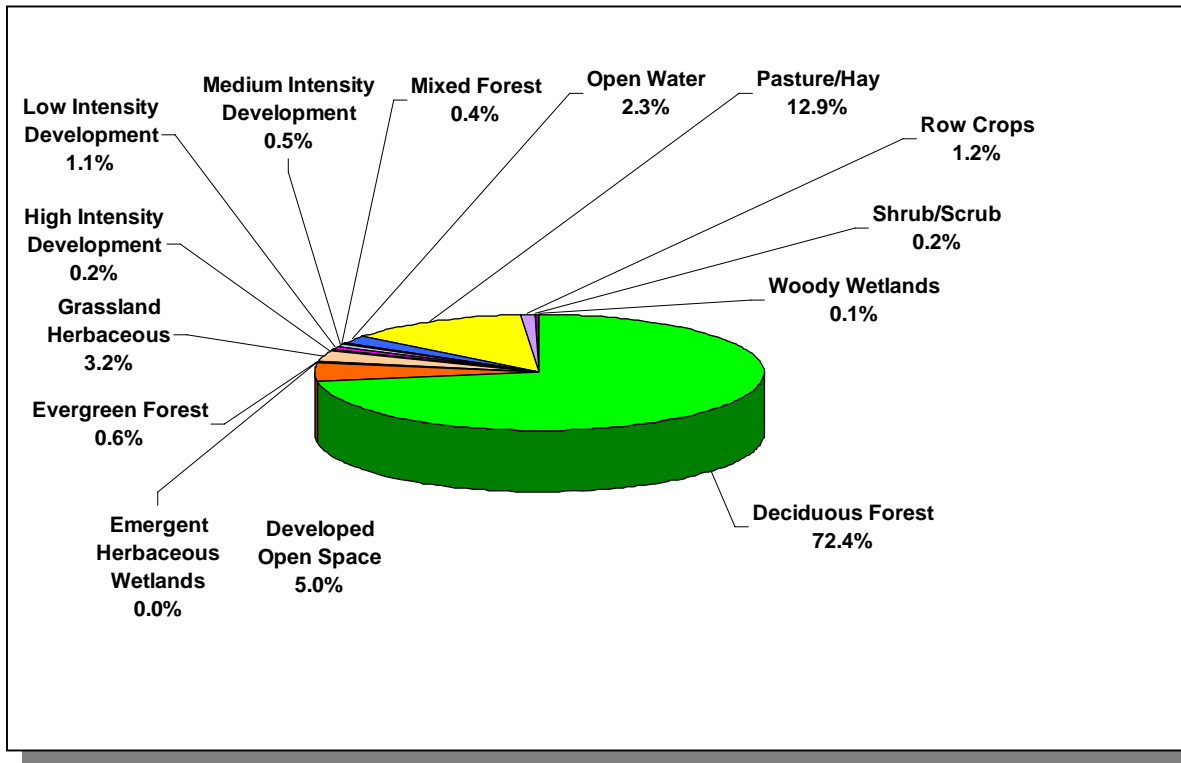


Figure 4-5. Land Use Distribution in Subwatershed 051301060101. More information is provided in Appendix IV.

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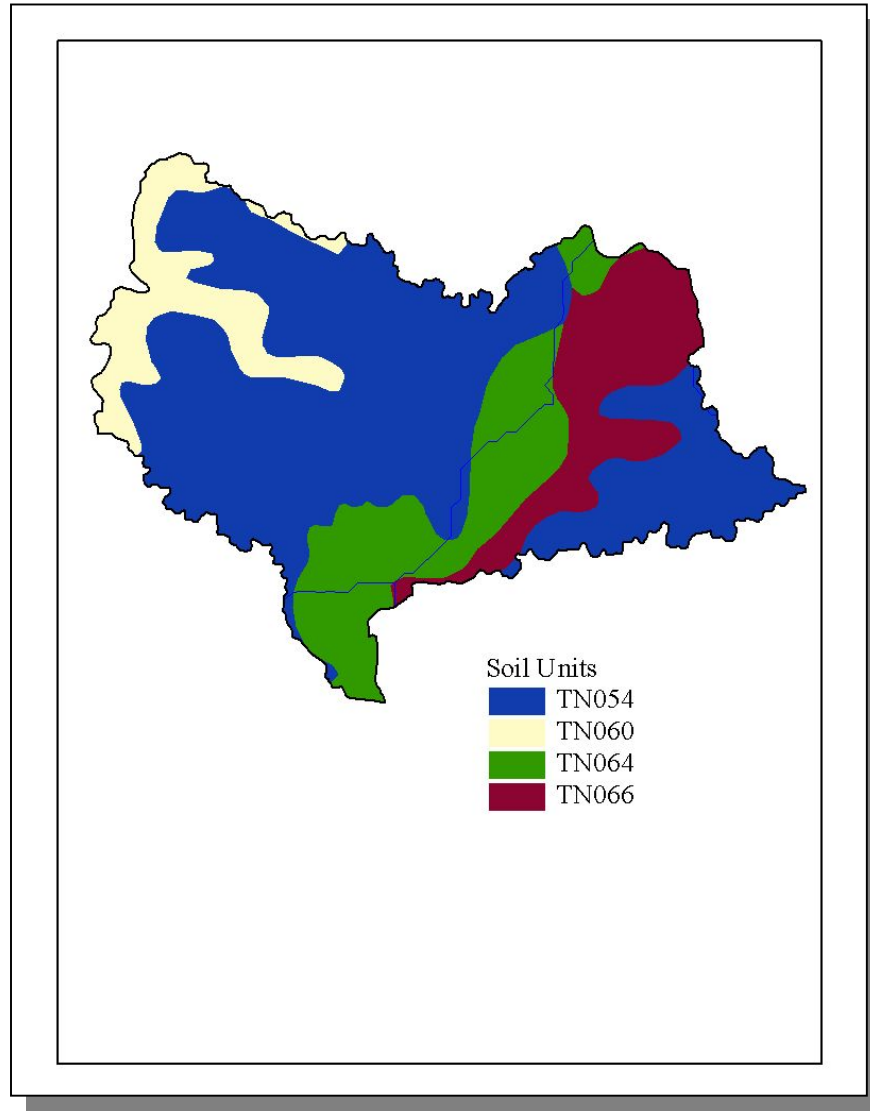


Figure 4-6. STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 051301060101.

STATSGO MAP UNIT ID	PERCENT HYDRIC	HYDROLOGIC GROUP	PERMEABILITY (in/hour)	SOIL pH	ESTIMATED SOIL TEXTURE	SOIL ERODIBILITY
TN054	0.00	C	3.04	4.84	Loam	0.32
TN060	5.00	B	1.30	5.32	Silty Loam	0.39
TN064	7.00	C	1.19	5.82	Silty Loam	0.37
TN066	0.00	B	2.62	4.75	Loam	0.28

Table 4-2. Soil Characteristics by STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 051301060101. The definition of "Hydrologic Group" is provided in Appendix IV.

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County	COUNTY POPULATION			Portion of Watershed (%)	ESTIMATED POPULATION IN WATERSHED			% Change (1990-2000)
	1990	1997	2000		1990	1997	2000	
Clay	7,238	7,311	7,976	9.01	652	659	718	10.1

Table 4-3. Population Estimates in Subwatershed 051301060101.

			NUMBER OF HOUSING UNITS			
Populated Place	County	Population	Total	Public Sewer	Septic Tank	Other
Celina	Clay	1,493	685	645	36	4

Table 4-4. Housing and Sewage Disposal Practices of Select Communities in Subwatershed 051301060101.

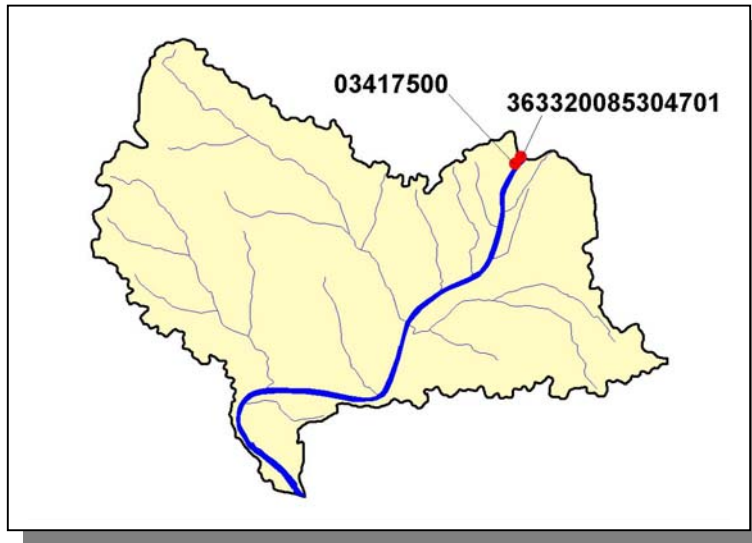


Figure 4-7. Location of Historical Streamflow Data Collection Sites in Subwatershed 051301060101. More information is provided in Appendix IV.

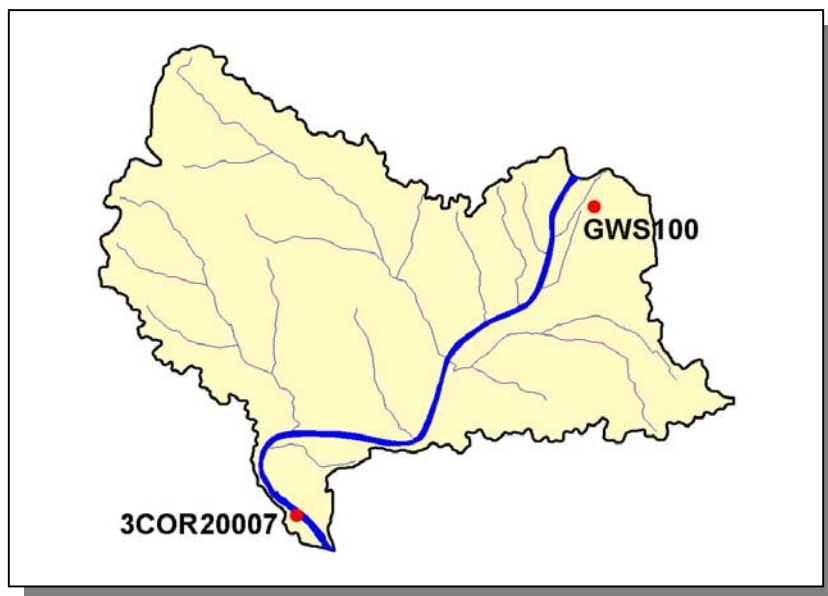


Figure 4-8. Location of Monitoring Sites in EPA's STORET Database in Subwatershed 051301060101. More information, including site names and locations, is provided in Appendix IV.

4.2.A.i.a. Point Source Contributions.

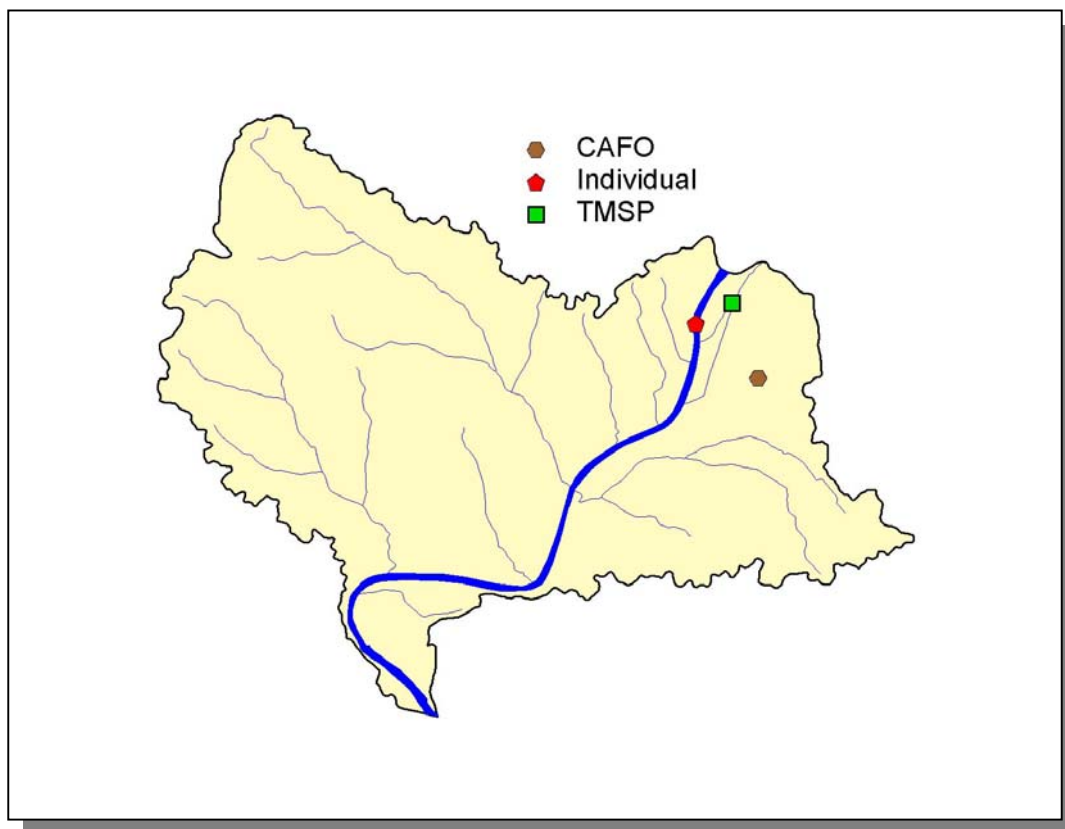


Figure 4-9. Location of Permits Issued in Subwatershed 051301060101. More information, including the names of facilities, is provided in Appendix IV.

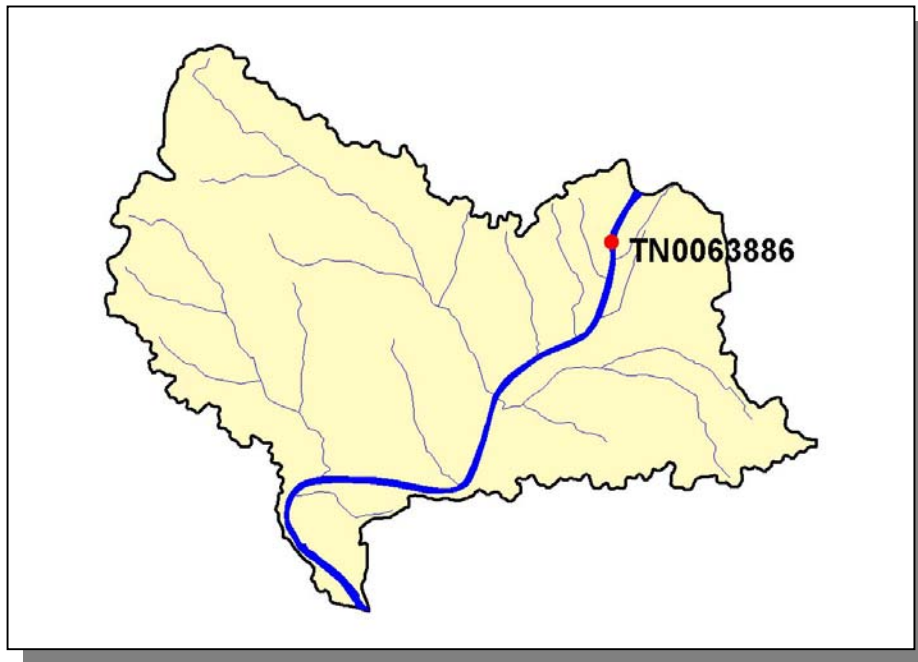


Figure 4-10. Location of Active NPDES Sites in Subwatershed 051301060101. More information, including the names of facilities, is provided in Appendix IV.



Figure 4-11. Location of Concentrated Animal Feeding Operations (CAFO) in Subwatershed 051301060101. More information, including the names of facilities, is provided in Appendix IV.

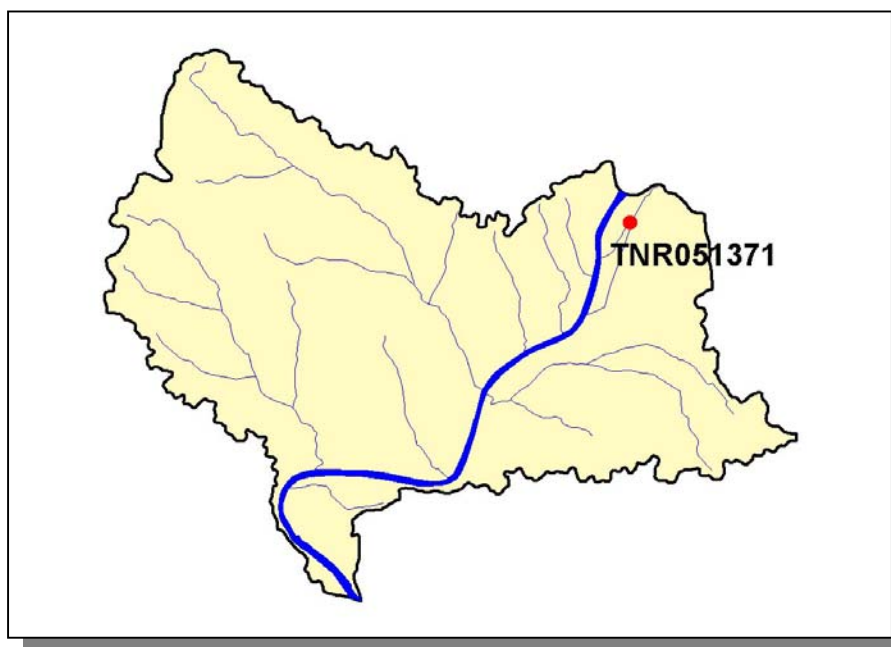


Figure 4-12. Location of TMSR Sites in Subwatershed 051301060101. More information, including the names of facilities, is provided in Appendix IV.

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4.2.A.i.b. Nonpoint Source Contributions.

LIVESTOCK COUNTS			
Cattle	Chickens (Layers)	Hogs	Sheep
1,146	<5	14	<5

Table 4-5. Summary of Livestock Count Estimates in Subwatershed 051301060101. According to the 1997 Census of Agriculture (<http://www.nass.usda.gov/census/>), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older; "Chickens Sold" are all chickens used to produce meat.

LIVESTOCK COUNTS				
County	Cattle	Chickens (Layers)	Hogs	Sheep
Clay	14,574	18	174	23

Table 4-6. Summary of Livestock Count Estimates in Clay County. According to the 1997 Census of Agriculture (<http://www.nass.usda.gov/census/>), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older; "Chickens Sold" are all chickens used to produce meat.

County	INVENTORY		REMOVAL RATE	
	Forest Land (thousand acres)	Timber Land (thousand acres)	Growing Stock (million cubic feet)	Sawtimber (million board feet)
Clay	105.1	105.1	2.3	10.1

Table 4-7. Forest Acreage and Annual Removal Rates (1987-1994) in Clay County.

CROPS	TONS/ACRE/YEAR
Grass (Pastureland)	1.14
Grass (Hayland)	0.40
Legumes, Grass (Hayland)	0.53
Grass, Forbs, Legumes (Mixed Pasture)	1.38
Tobacco (Row Crops)	28.52
Farmsteads and Ranch Headquarters	1.56

Table 4-8. Annual Estimated Total Soil Loss in Subwatershed 051301060101.

4.2.A.ii. 051301060102 (Cumberland River).

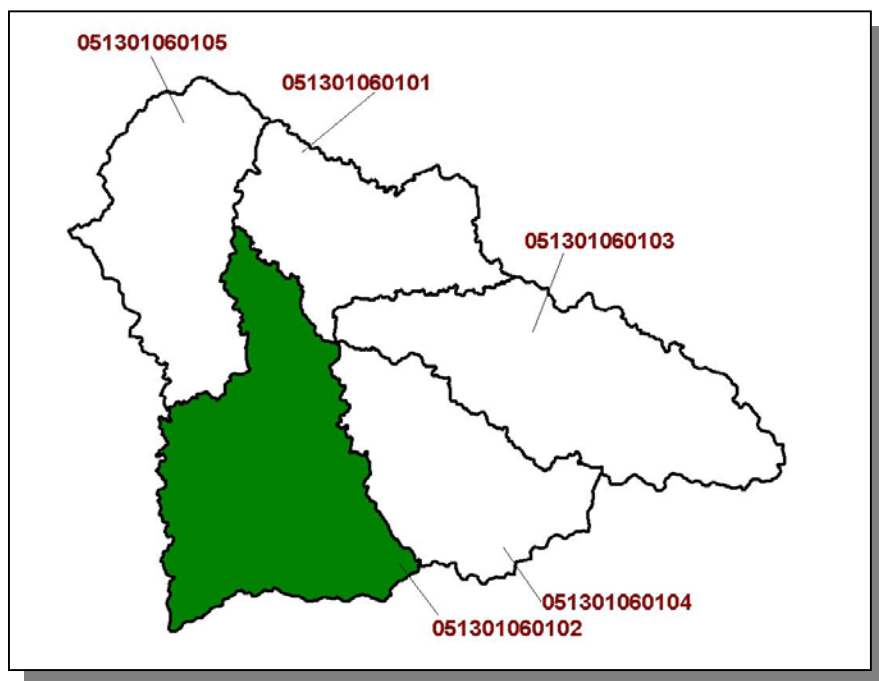


Figure 4-13. Location of Subwatershed 051301060102. All Clear Fork of the Cumberland River Watershed HUC-12 subwatershed boundaries are shown for reference.

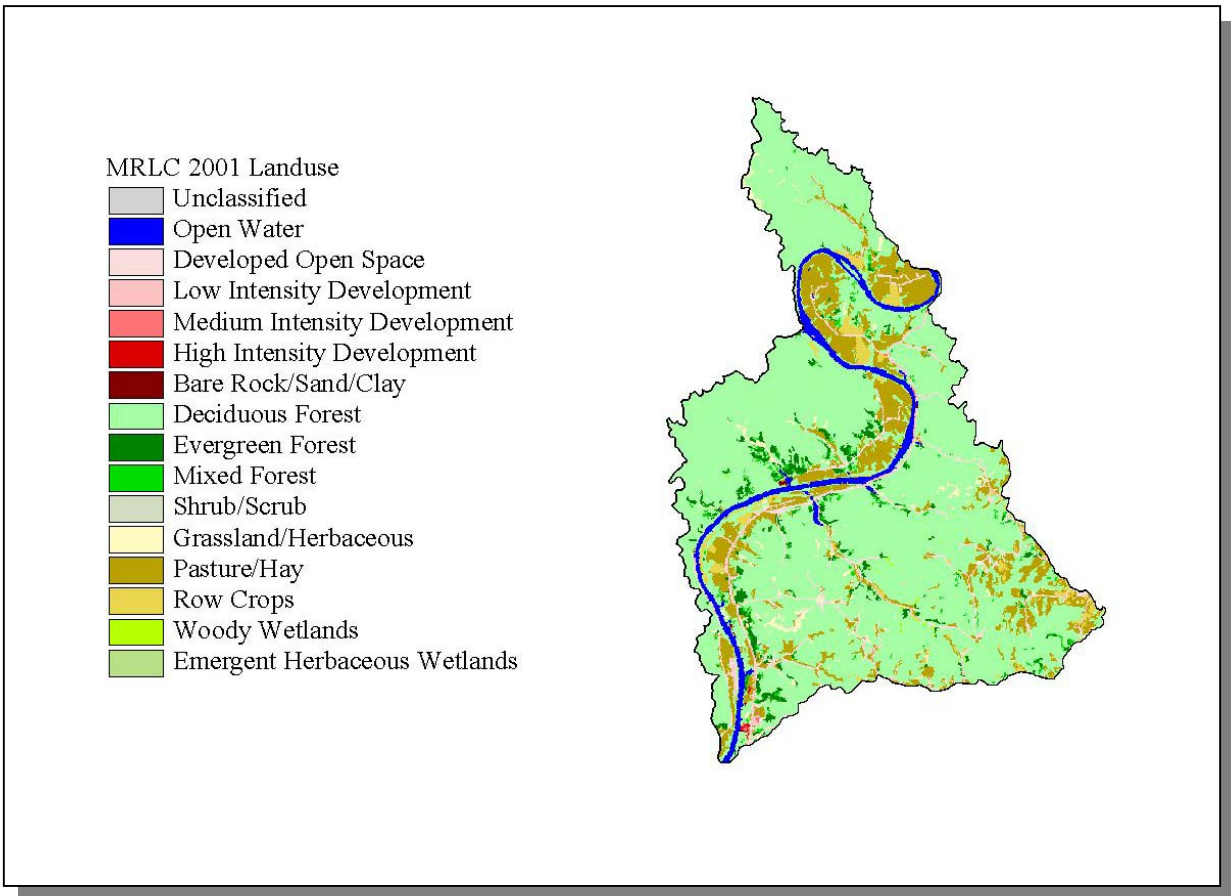


Figure 4-14. Illustration of Land Use Distribution in Subwatershed 051301060102.

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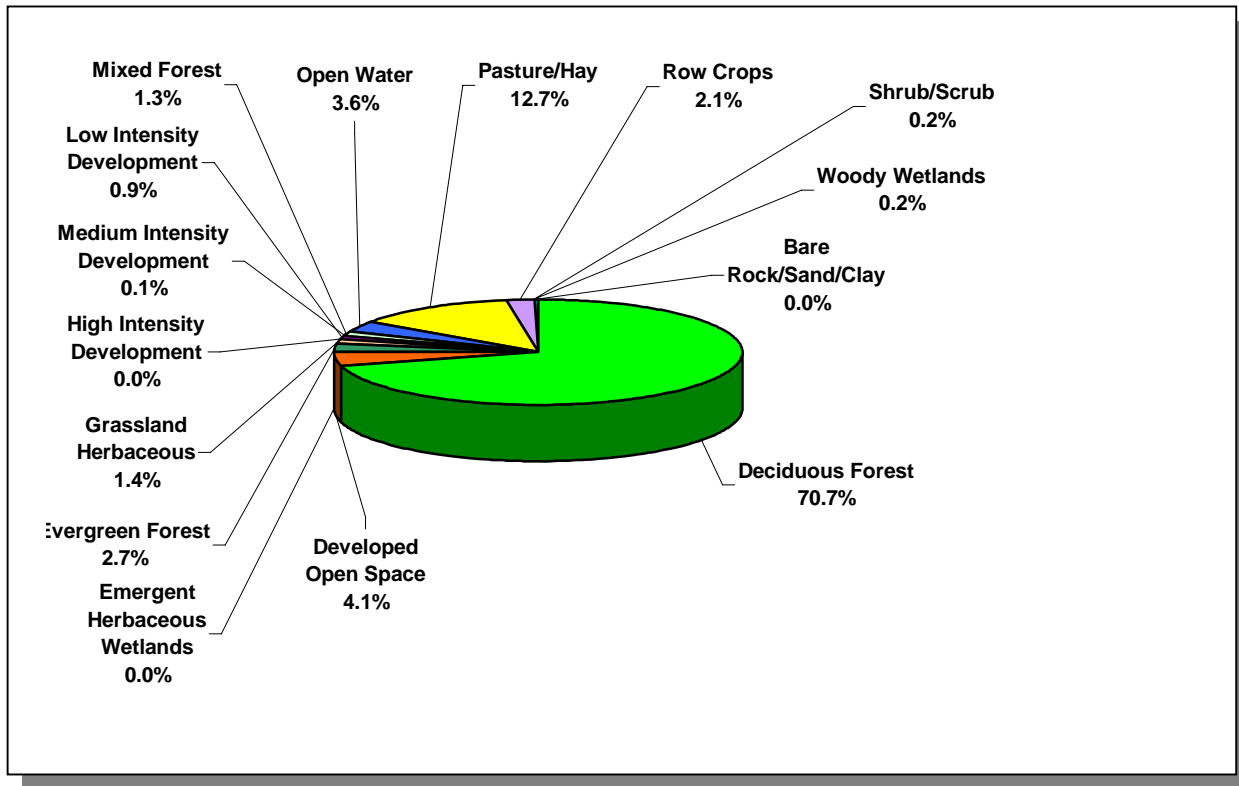


Figure 4-15. Land Use Distribution in Subwatershed 051301060102. More information is provided in Appendix IV.

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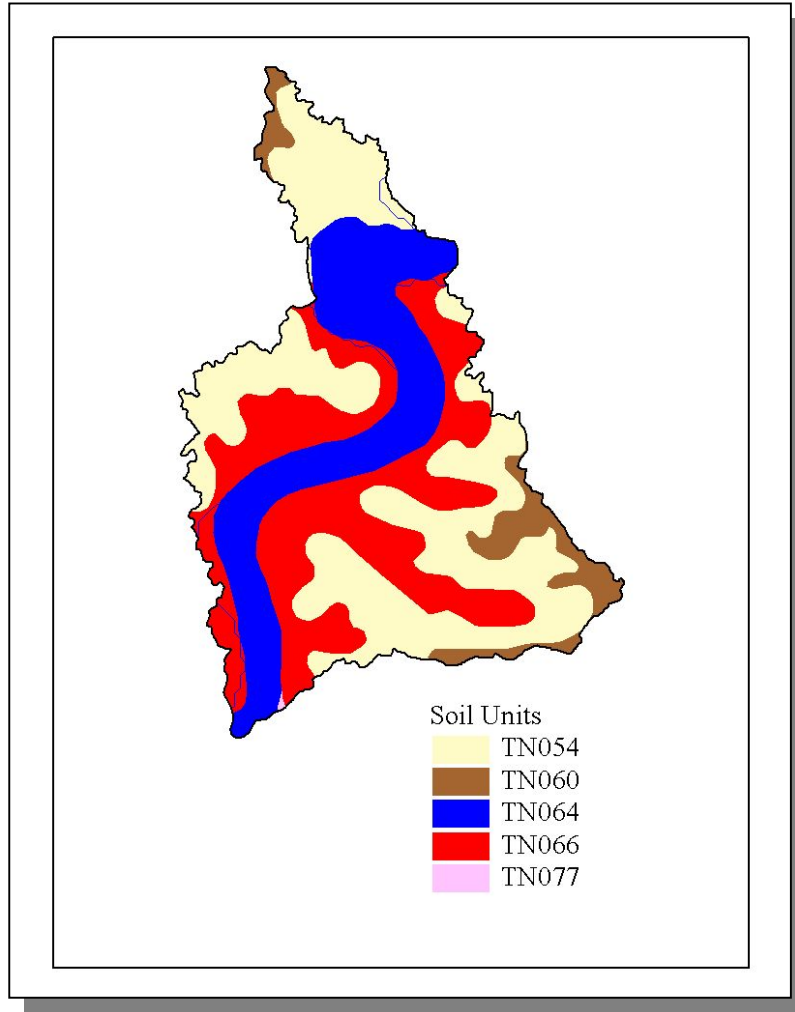


Figure 4-16. STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 051301060102.

STATSGO MAP UNIT ID	PERCENT HYDRIC	HYDROLOGIC GROUP	PERMEABILITY (in/hour)	SOIL pH	ESTIMATED SOIL TEXTURE	SOIL ERODIBILITY
TN054	0.00	C	3.04	4.84	Loam	0.32
TN060	5.00	B	1.30	5.32	Silty Loam	0.39
TN064	7.00	C	1.19	5.82	Silty Loam	0.37
TN066	0.00	B	2.62	4.75	Loam	0.28
TN077	4.00	C	2.16	5.03	Loam	0.34

Table 4-9. Soil Characteristics by STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 051301060102. The definition of "Hydrologic Group" is provided in Appendix IV.

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County	COUNTY POPULATION			Portion of Watershed (%)	ESTIMATED POPULATION IN WATERSHED			% Change (1990-2000)
	1990	1997	2000		1990	1997	2000	
Clay	7,238	7,311	7,976	2.48	180	182	198	10.0
Jackson	9,297	9,537	10,984	10.96	1,019	1,045	1,203	18.1
Total	16,535	16,848	18,960		1,199	1,227	1,401	16.8

Table 4-10. Population Estimates in Subwatershed 051301060102.

			NUMBER OF HOUSING UNITS			
Populated Place	County	Population	Total	Public Sewer	Septic Tank	Other
Gainesboro	Jackson	1,002	495	411	82	2

Table 4-11. Housing and Sewage Disposal Practices of Select Communities in Subwatershed 051301060102.

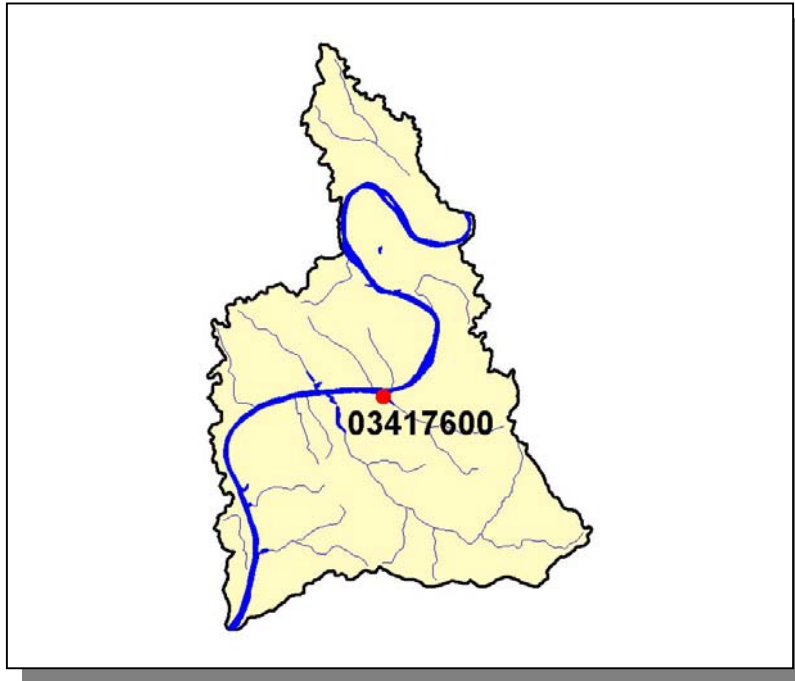


Figure 4-17. Location of Historical Streamflow Data Collection Sites in Subwatershed 051301060102. More information is provided in Appendix IV.

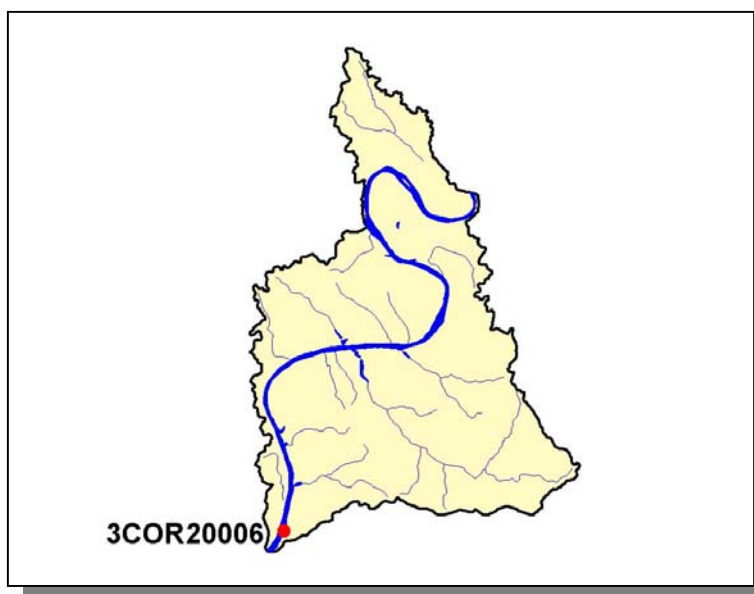


Figure 4-18. Location of Monitoring Sites in EPA's STORET Database in Subwatershed 051301060102. More information, including site names and locations, is provided in Appendix IV.

4.2.A.ii.a. Point Source Contributions.

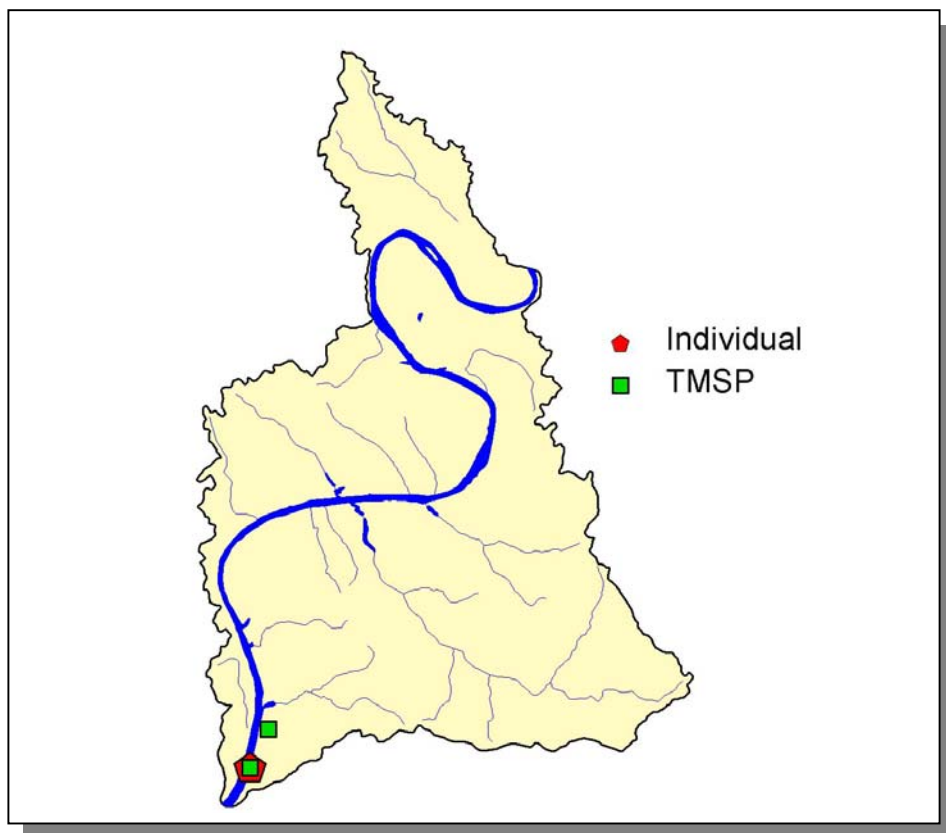


Figure 4-19. Location of Permits Issued in Subwatershed 051301060102. More information, including the names of facilities, is provided in Appendix IV.

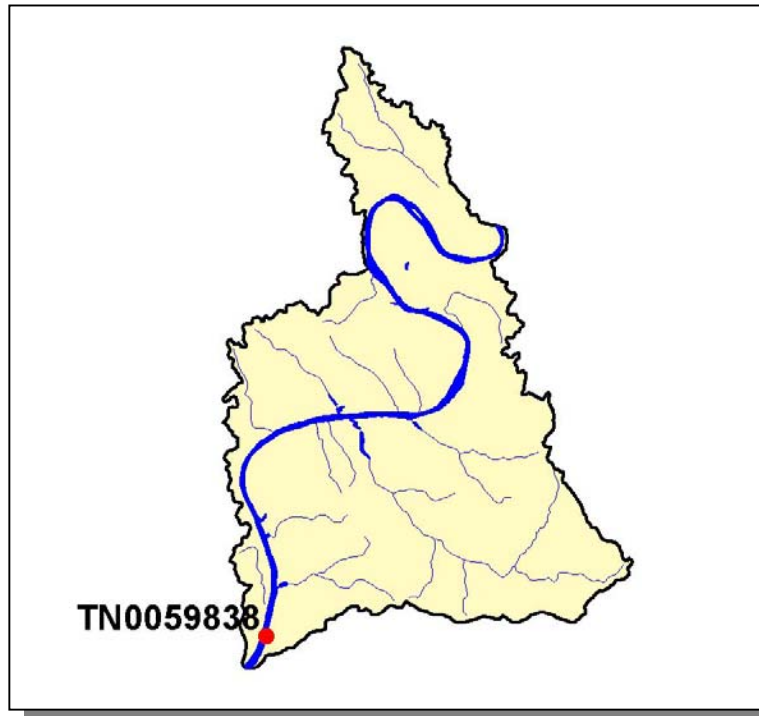


Figure 4-20. Location of Active NPDES Sites in Subwatershed 051301060102. More information, including the names of facilities, is provided in Appendix IV.

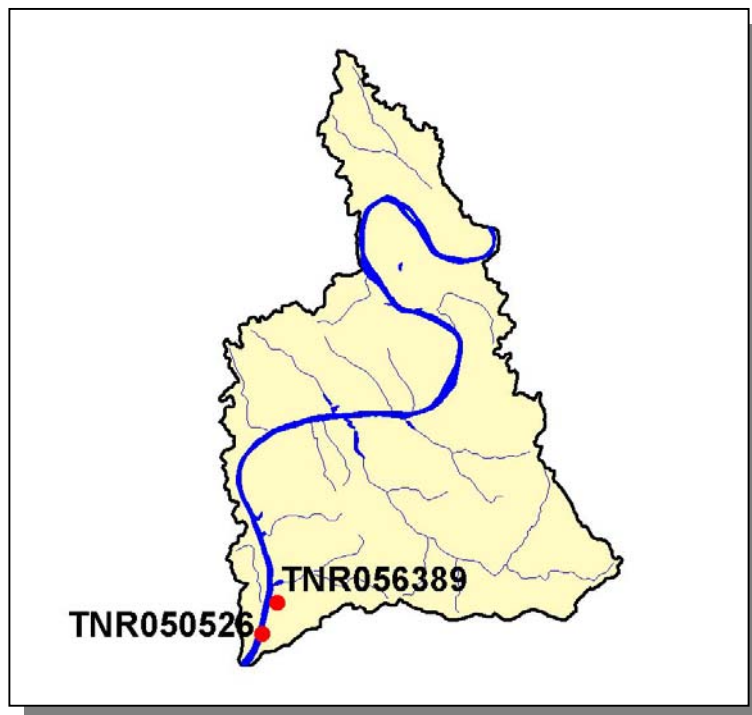


Figure 4-21. Location of TMSP Sites in Subwatershed 051301060102. More information, including the names of facilities, is provided in Appendix IV.

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4.2.A.ii.b. Nonpoint Source Contributions.

LIVESTOCK COUNTS					
Beef Cow	Cattle	Milk Cow	Chickens (Layers)	Hogs	Sheep
786	1,793	<5	<5	51	5

Table 4-12. Summary of Livestock Count Estimates in Subwatershed 051301060102. According to the 1997 Census of Agriculture (<http://www.nass.usda.gov/census/>), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older.

LIVESTOCK COUNTS						
County	Beef Cow	Cattle	Milk Cow	Chickens (Layers)	Hogs	Sheep
Clay	0	14,574	0	18	174	23
Jackson	6,962	12,086	10	727	403	39

Table 4-13. Summary of Livestock Count Estimates in Clay and Jackson Counties. According to the 1997 Census of Agriculture (<http://www.nass.usda.gov/census/>), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older; "Chickens Sold" are all chickens used to produce meat.

County	INVENTORY		REMOVAL RATE	
	Forest Land (thousand acres)	Timber Land (thousand acres)	Growing Stock (million cubic feet)	Sawtimber (million board feet)
Clay	105.1	105.1	2.3	10.1
Jackson	135.9	135.9	0.9	5.1

Table 4-14. Forest Acreage and Annual Removal Rates (1987-1994) in Clay and Jackson Counties.

CROPS	TONS/ACRE/YEAR
Legumes (Pastureland)	0.41
Grass (Pastureland)	2.07
Grass (Hayland)	0.40
Legumes (Hayland)	0.17
Legumes, Grass (Hayland)	0.53
Grass, Forbs, Legumes (Mixed Pasture)	1.89
Corn (Row Crops)	21.43
Tobacco (Row Crops)	28.52
Farmsteads and Ranch Headquarters	1.35

Table 4-15. Annual Estimated Total Soil Loss in Subwatershed 051301060102.

4.2.A.iii. 051301060103 (Mill Creek).

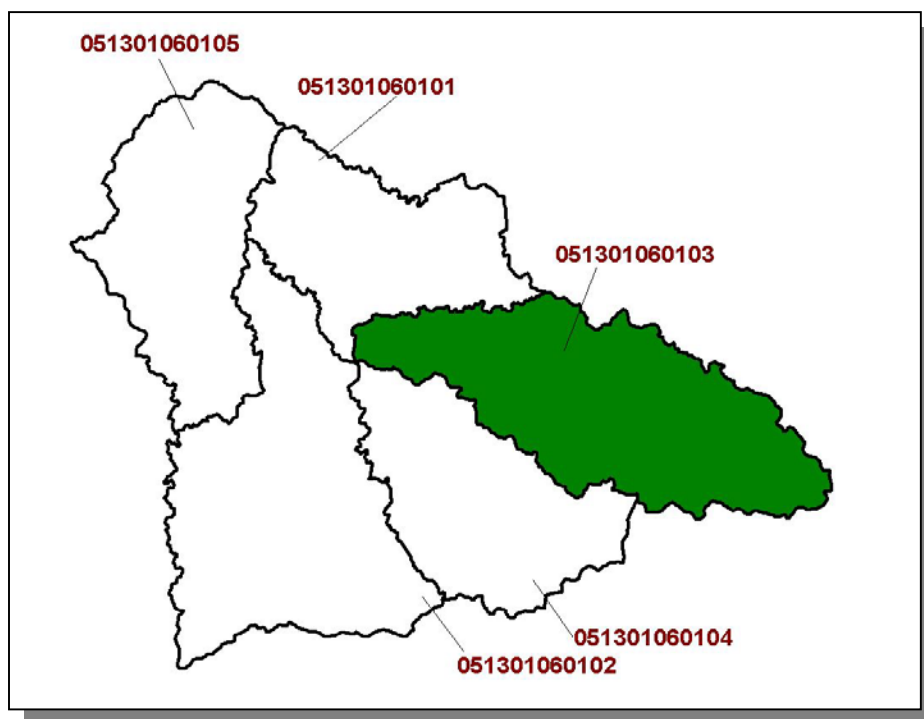


Figure 4-22. Location of Subwatershed 051301060103. All Clear Fork of the Cumberland River Watershed HUC-12 subwatershed boundaries are shown for reference.

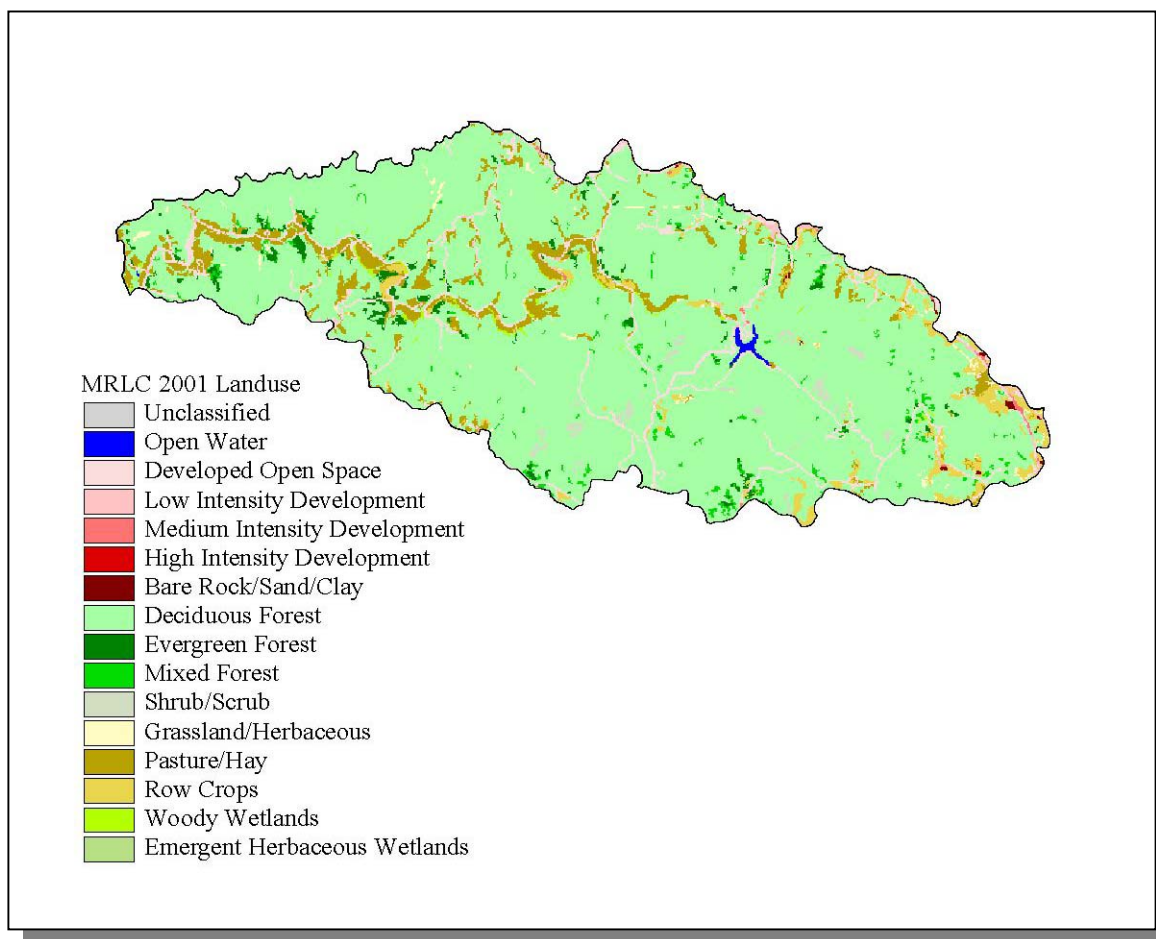


Figure 4-23. Illustration of Land Use Distribution in Subwatershed 051301060103.

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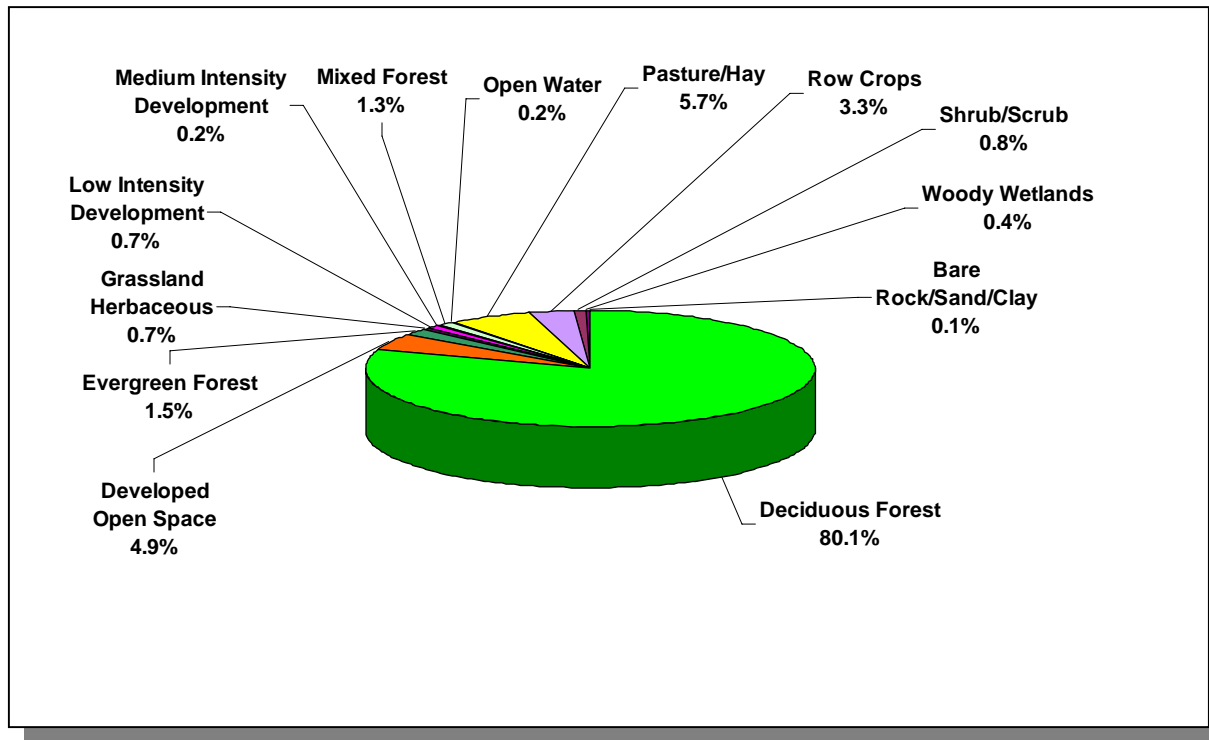


Figure 4-24. Land Use Distribution in Subwatershed 051301060103. More information is provided in Appendix IV.

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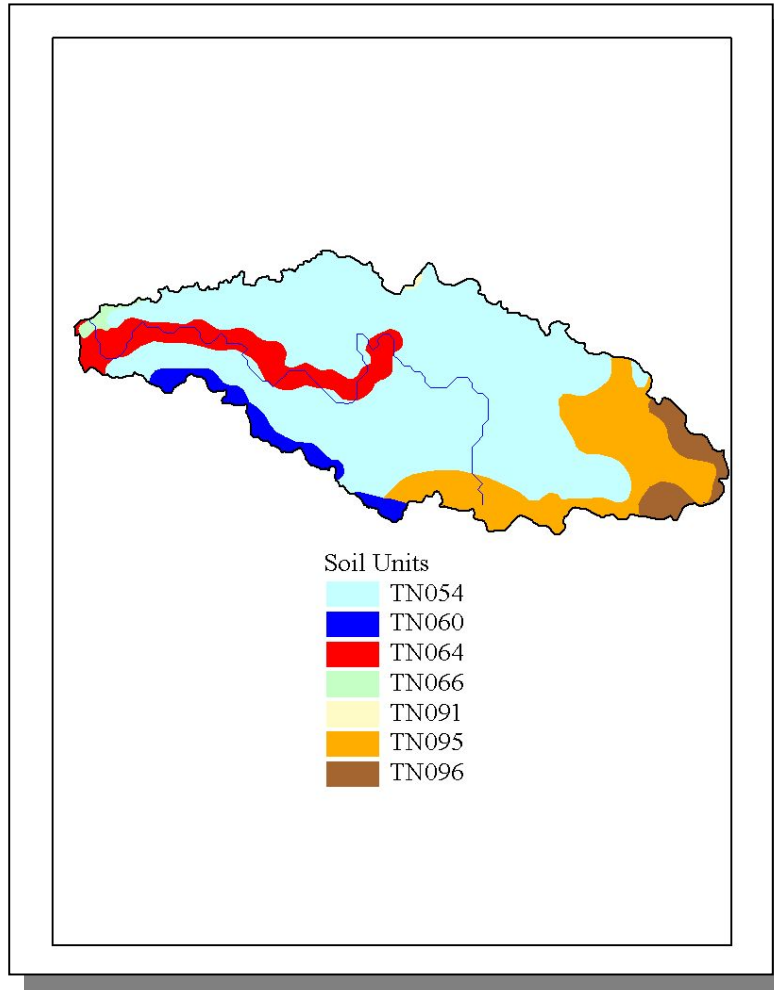


Figure 4-25. STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 051301060103.

STATSGO MAP UNIT ID	PERCENT HYDRIC	HYDROLOGIC GROUP	PERMEABILITY (in/hour)	SOIL pH	ESTIMATED SOIL TEXTURE	SOIL ERODIBILITY
TN054	0.00	C	3.04	4.84	Loam	0.32
TN060	5.00	B	1.30	5.32	Silty Loam	0.39
TN064	7.00	C	1.19	5.82	Silty Loam	0.37
TN066	0.00	B	2.62	4.75	Loam	0.28
TN091	0.00	B	2.95	5.86	Loam	0.34
TN095	0.00	B	2.35	5.12	Loam	0.31
TN096	19.00	C	1.22	5.16	Silty Loam	0.38

Table 4-16. Soil Characteristics by STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 051301060103. The definition of "Hydrologic Group" is provided in Appendix IV.

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County	COUNTY POPULATION			Portion of Watershed (%)	ESTIMATED POPULATION IN WATERSHED			% Change (1990-2000)
	1990	1997	2000		1990	1997	2000	
Clay	7,238	7,311	7,976	5.93	429	433	473	10.3
Overton	17,636	19,171	20,118	5.27	930	1,011	1,061	14.1
Total	24,874	26,482	28,094		1,359	1,444	1,534	12.9

Table 4-17. Population Estimates in Subwatershed 051301060103.



Figure 4-26. Location of Monitoring Sites in EPA's STORET Database in Subwatershed 051301060103. More information, including site names and locations, is provided in Appendix IV.

4.2.A.iii.a. Point Source Contributions.

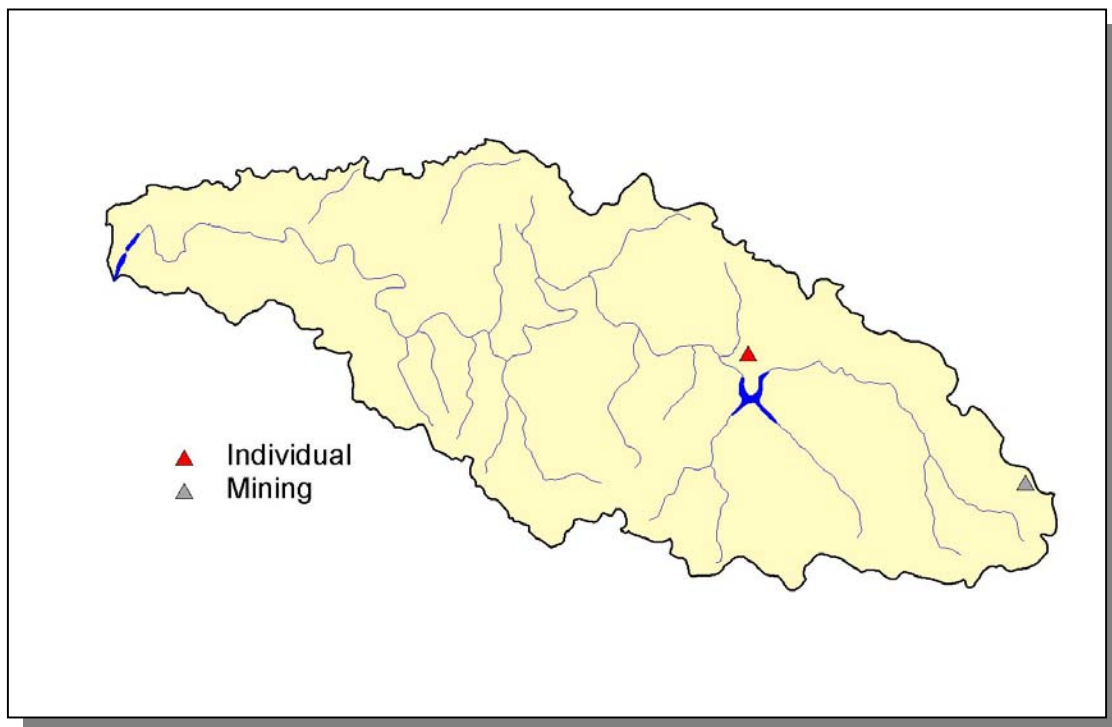


Figure 4-27. Location of Permits Issued in Subwatershed 051301060103. More information, including the names of facilities, is provided in Appendix IV.

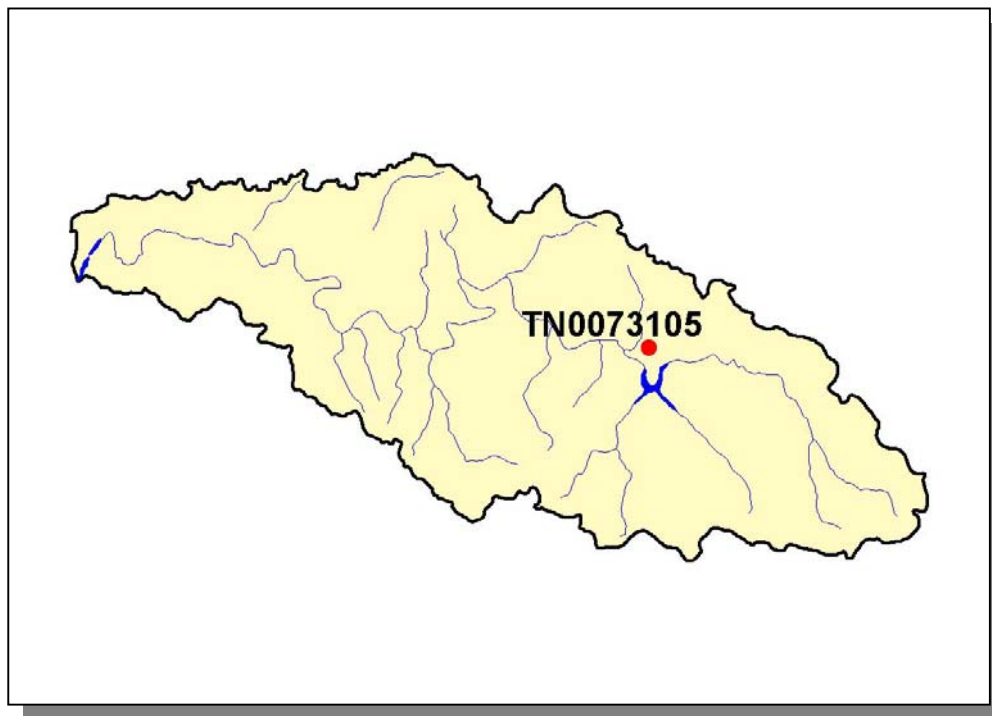


Figure 4-28. Location of Active NPDES Sites in Subwatershed 051301060103. More information, including the names of facilities, is provided in Appendix IV.

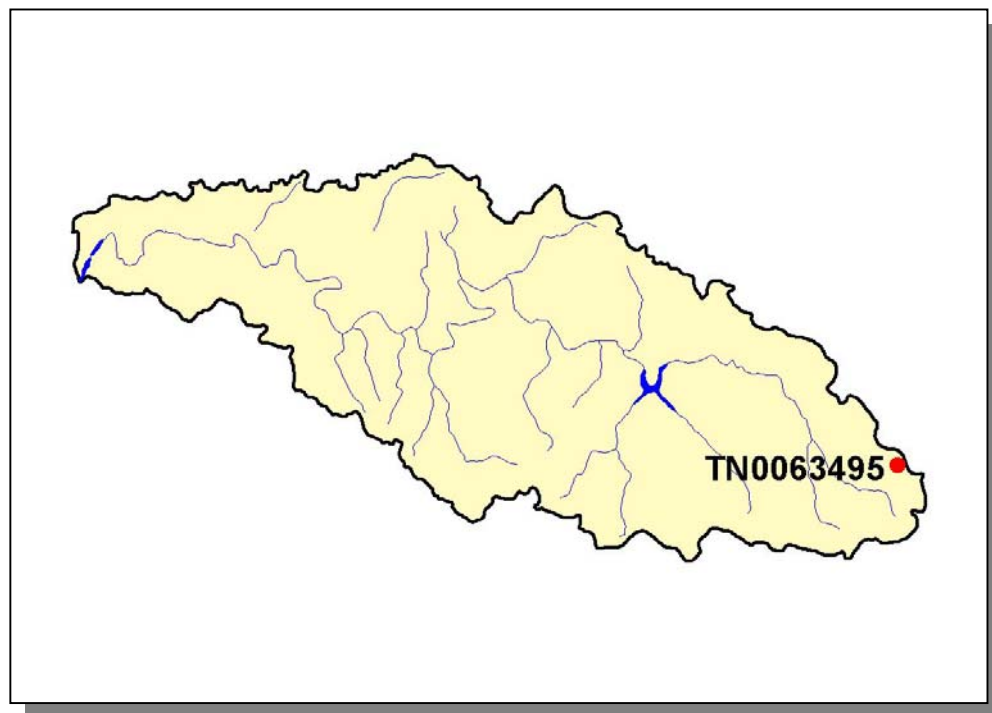


Figure 4-29. Location of Active Mining Sites in Subwatershed 051301060103. More information, including the names of mining operations, is provided in Appendix IV.

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4.2.A.iii.b. Nonpoint Source Contributions.

LIVESTOCK COUNTS					
Beef Cow	Cattle	Milk Cow	Chickens (Layers)	Hogs	Sheep
152	640	12	<5	12	<5

Table 4-18. Summary of Livestock Count Estimates in Subwatershed 051301060103. According to the 1997 Census of Agriculture (<http://www.nass.usda.gov/census/>), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older.

County	Beef Cow	Cattle	Milk Cow	Chickens (Layers)	Hogs	Sheep
Clay	0	14,574	0	18	174	23
Overton	15,150	27,812	1,200	1,173	811	59

Table 4-19. Summary of Livestock Count Estimates in Clay and Overton Counties. According to the 1997 Census of Agriculture (<http://www.nass.usda.gov/census/>), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older.

County	INVENTORY		REMOVAL RATE	
	Forest Land (thousand acres)	Timber Land (thousand acres)	Growing Stock (million cubic feet)	Sawtimber (million board feet)
Clay	105.1	105.1	2.3	10.1
Overton	170.3	170.3	1.7	7.0

Table 4-20. Forest Acreage and Annual Removal Rates (1987-1994) in Clay and Overton Counties.

CROPS	TONS/ACRE/YEAR
Grass (Pastureland)	0.62
Grass (Hayland)	0.34
Legumes, Grass (Hayland)	1.93
Grass, Forbs, Legumes (Mixed Pasture)	0.96
Corn (Row Crops)	4.35
Tobacco (Row Crops)	28.52
Soybeans (Row Crops)	10.79
Wheat (Close-Grown Cropland)	7.00
Other Vegetable and Truck Crops	21.46
Conservation Reserve Program Lands	0.46
Farmsteads and Ranch Headquarters	0.98

Table 4-21. Annual Estimated Total Soil Loss in Subwatershed 051301060103.

4.2.A.iv. 051301060104 (Dry Fork Creek).

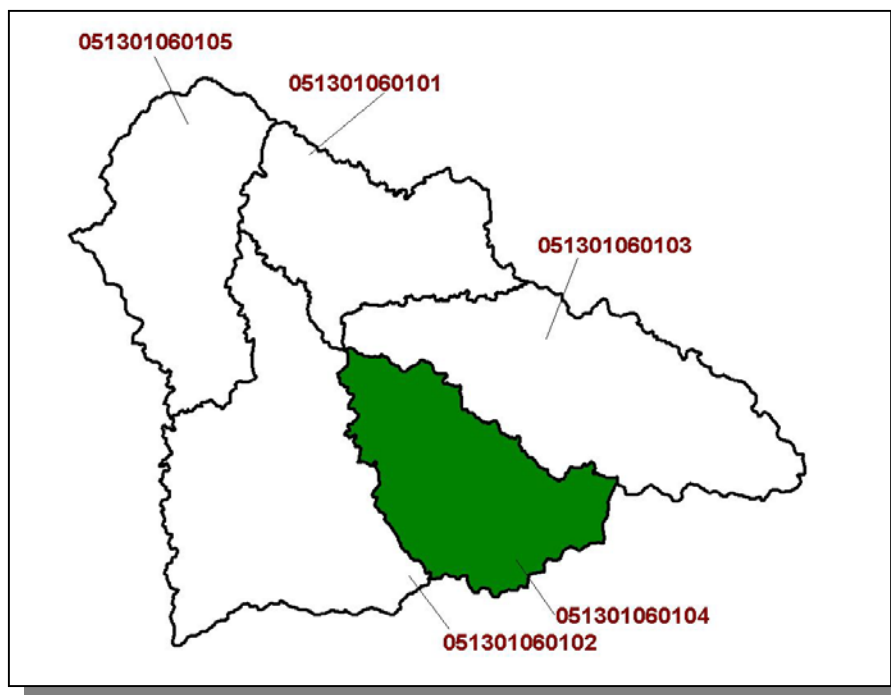


Figure 4-30. Location of Subwatershed 051301060104. All Clear Fork of the Cumberland River Watershed HUC-12 subwatershed boundaries are shown for reference.

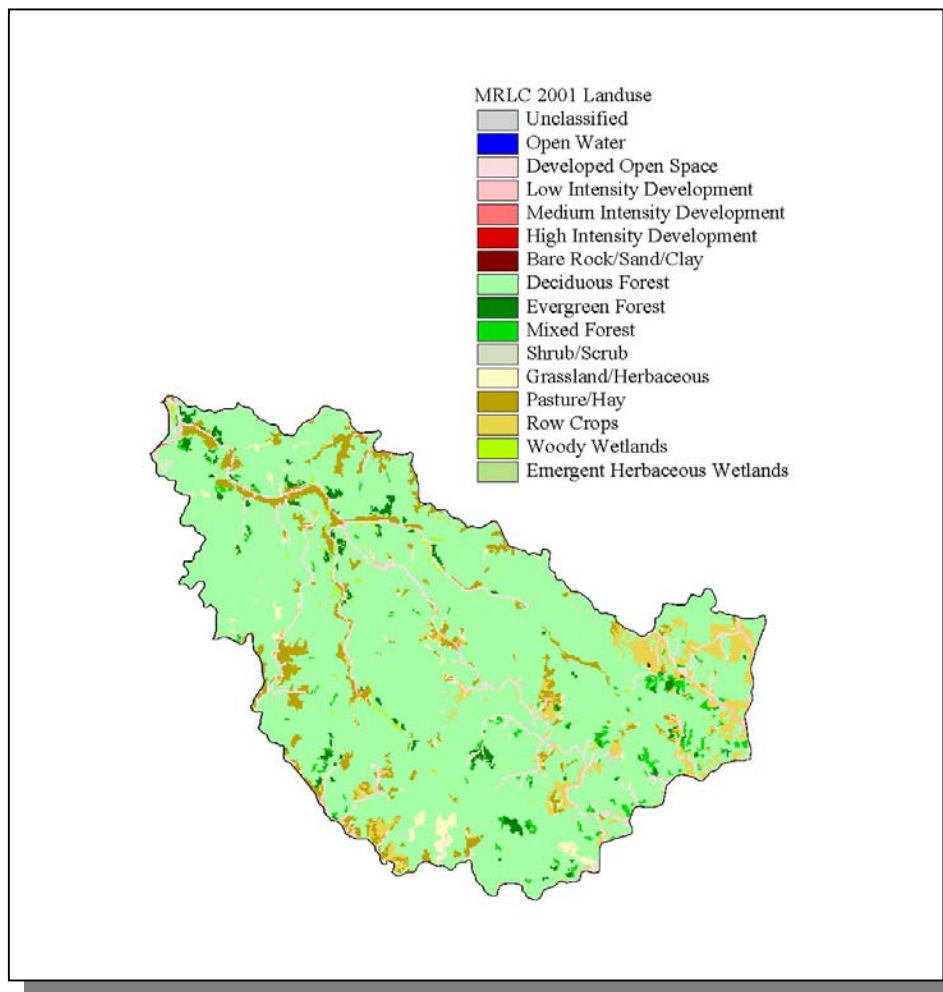


Figure 4-31. Illustration of Land Use Distribution in Subwatershed 051301060104.

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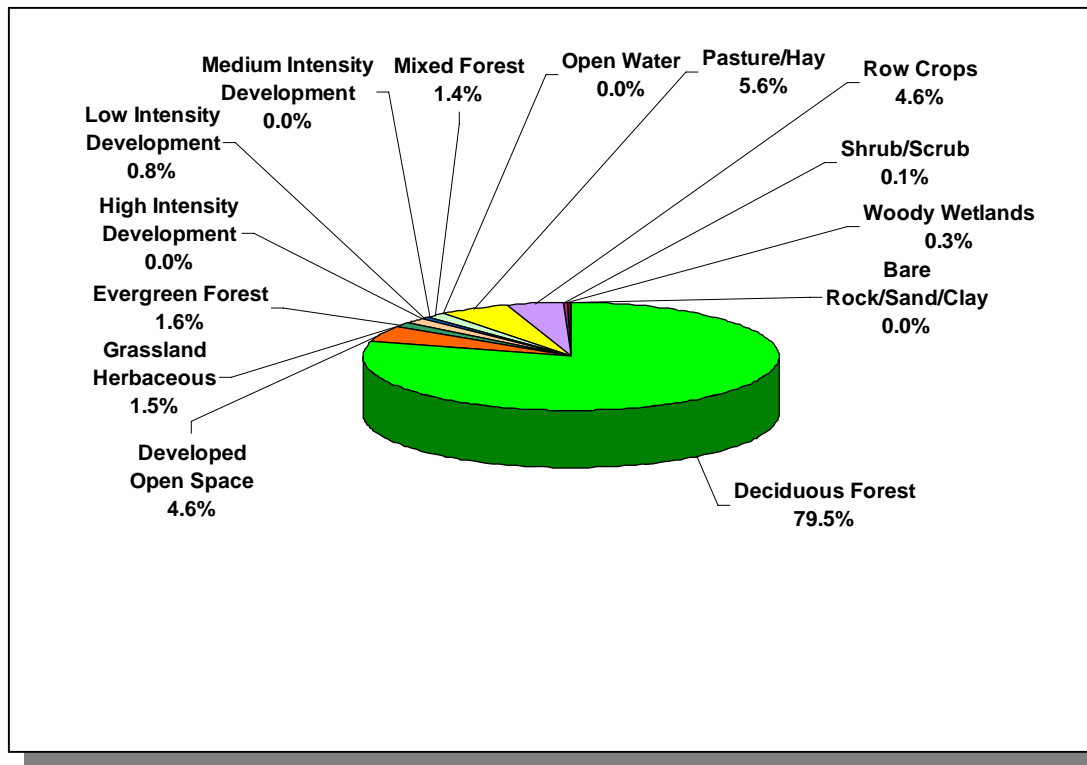


Figure 4-32. Land Use Distribution in Subwatershed 051301060104. More information is provided in Appendix IV.

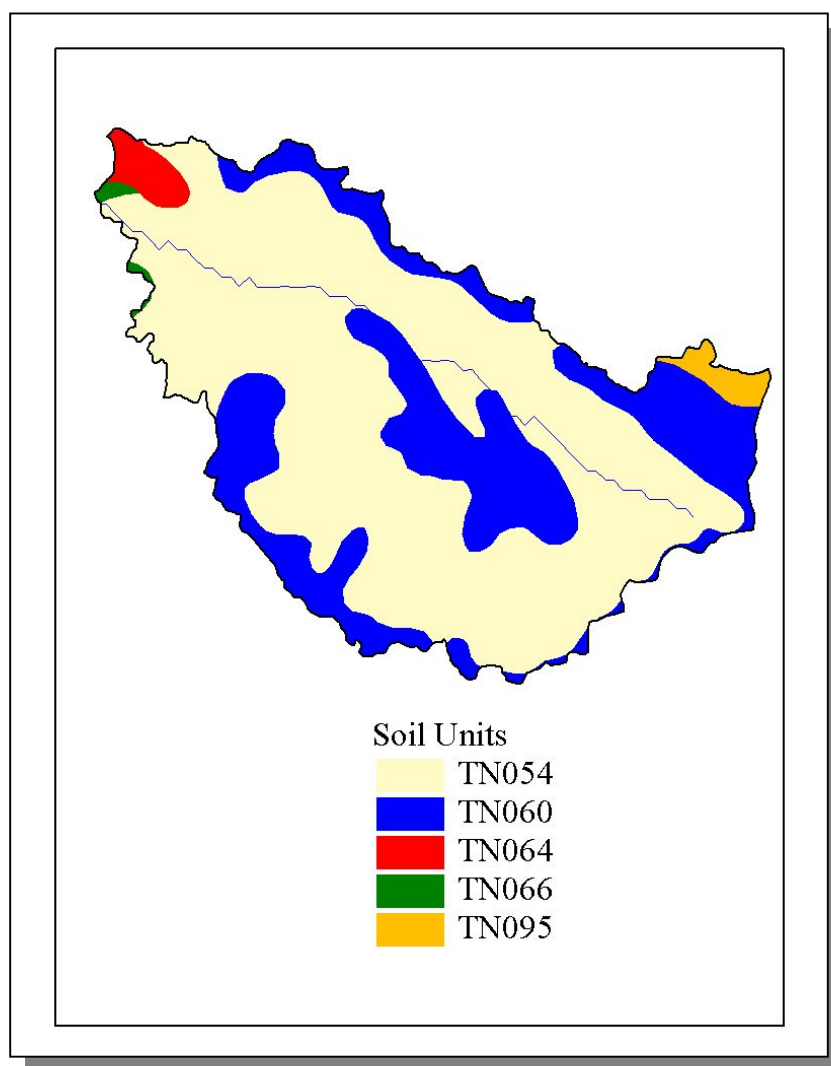


Figure 4-33. STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 051301060104.

STATSGO MAP UNIT ID	PERCENT HYDRIC	HYDROLOGIC GROUP	PERMEABILITY (in/hour)	SOIL pH	ESTIMATED SOIL TEXTURE	SOIL ERODIBILITY
TN054	0.00	C	3.04	4.84	Loam	0.32
TN060	5.00	B	1.30	5.32	Silty Loam	0.39
TN064	7.00	C	1.19	5.82	Silty Loam	0.37
TN066	0.00	B	2.62	4.75	Loam	0.28
TN095	0.00	B	2.35	5.12	Loam	0.31

Table 4-22. Soil Characteristics by STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 051301060104. The definition of "Hydrologic Group" is provided in Appendix IV.

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County	COUNTY POPULATION			Portion of Watershed (%)	ESTIMATED POPULATION IN WATERSHED			% Change (1990-2000)
	1990	1997	2000		1990	1997	2000	
Clay	7,238	7,311	7,976	4.62	334	338	369	10.5
Jackson	9,297	9,537	10,984	2.16	201	206	237	17.9
Overton	17,636	19,171	20,118	1.62	286	311	327	14.3
Total	34,171	36,019	39,078		821	855	933	13.6

Table 4-23. Population Estimates in Subwatershed 051301060104.

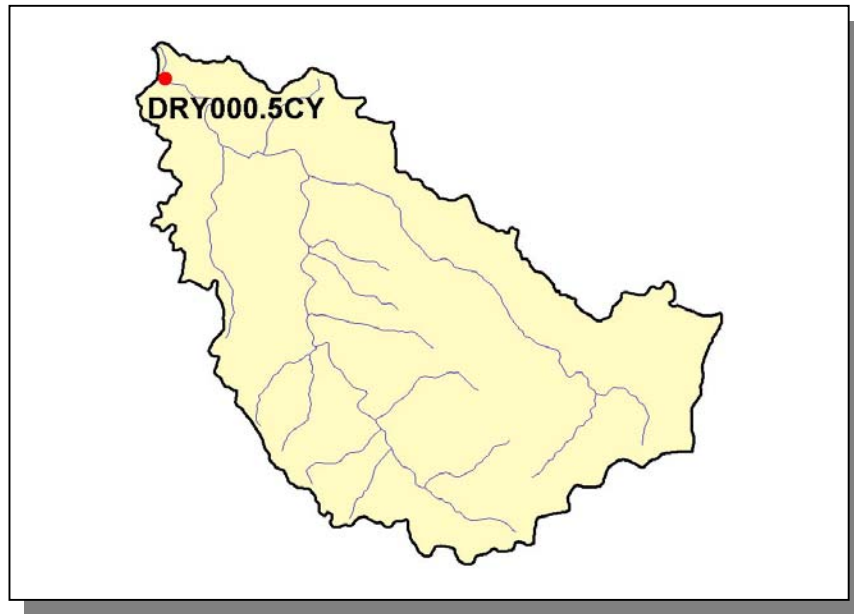


Figure 4-34. Location of Monitoring Sites in EPA's STORET Database in Subwatershed 051301060104. More information, including site names and locations, is provided in Appendix IV.

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4.2.A.iv.a. Point Source Contributions.

There are no point source contributions in this subwatershed.

4.2.A.iv.b. Nonpoint Source Contributions.

LIVESTOCK COUNTS					
Beef Cow	Cattle	Milk Cow	Chickens (Layers)	Hogs	Sheep
204	523	10	<5	13	<5

Table 4-24. Summary of Livestock Count Estimates in Subwatershed 051301060104. According to the 1997 Census of Agriculture (<http://www.nass.usda.gov/census/>), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older.

LIVESTOCK COUNTS						
County	Beef Cow	Cattle	Milk Cow	Chickens (Layers)	Hogs	Sheep
Clay	0	14,574	0	18	174	23
Jackson	6,962	12,086	10	727	403	39
Overton	15,150	27,812	1,200	1,173	811	59

Table 4-25. Summary of Livestock Count Estimates in Clay, Jackson, and Overton Counties. According to the 1997 Census of Agriculture (<http://www.nass.usda.gov/census/>), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older.

County	INVENTORY		REMOVAL RATE	
	Forest Land (thousand acres)	Timber Land (thousand acres)	Growing Stock (million cubic feet)	Sawtimber (million board feet)
Clay	105.1	105.1	2.3	10.1
Jackson	135.9	135.9	0.9	5.1
Overton	170.3	170.3	1.7	7.0

Table 4-26. Forest Acreage and Annual Removal Rates (1987-1994) in Clay, Jackson, and Overton Counties.

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CROPS	TONS/ACRE/YEAR
Legumes (Pastureland)	0.41
Grass (Pastureland)	1.19
Grass (Hayland)	0.36
Legumes (Hayland)	0.17
Legumes, Grass (Hayland)	1.39
Grass, Forbs, Legumes (Mixed Pasture)	1.35
Corn (Row Crops)	12.79
Tobacco (Row Crops)	28.52
Soybeans (Row Crops)	10.79
Wheat (Close-Grown Cropland)	7.00
Other Vegetable and Truck Crops	21.46
Conservation Reserve Program Lands	0.46
Farmsteads and Ranch Headquarters	1.23

Table 4-27. Annual Estimated Total Soil Loss in Subwatershed 051301060104.

4.2.A.v. 051301060105 (Brimstone Creek).

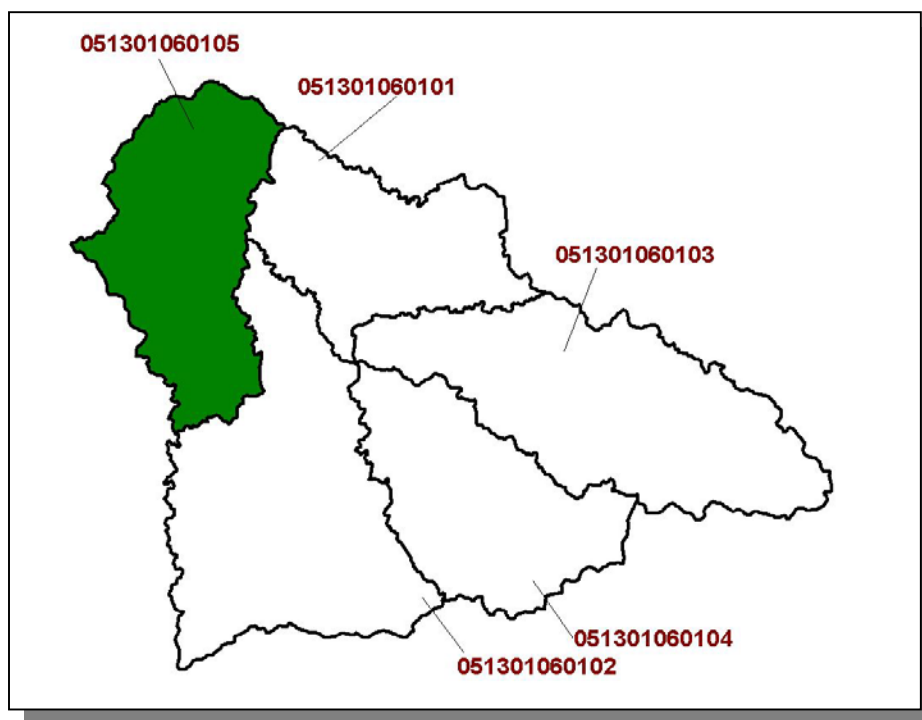


Figure 4-35. Location of Subwatershed 051301060105. All Clear Fork of the Cumberland River Watershed HUC-12 subwatershed boundaries are shown for reference.

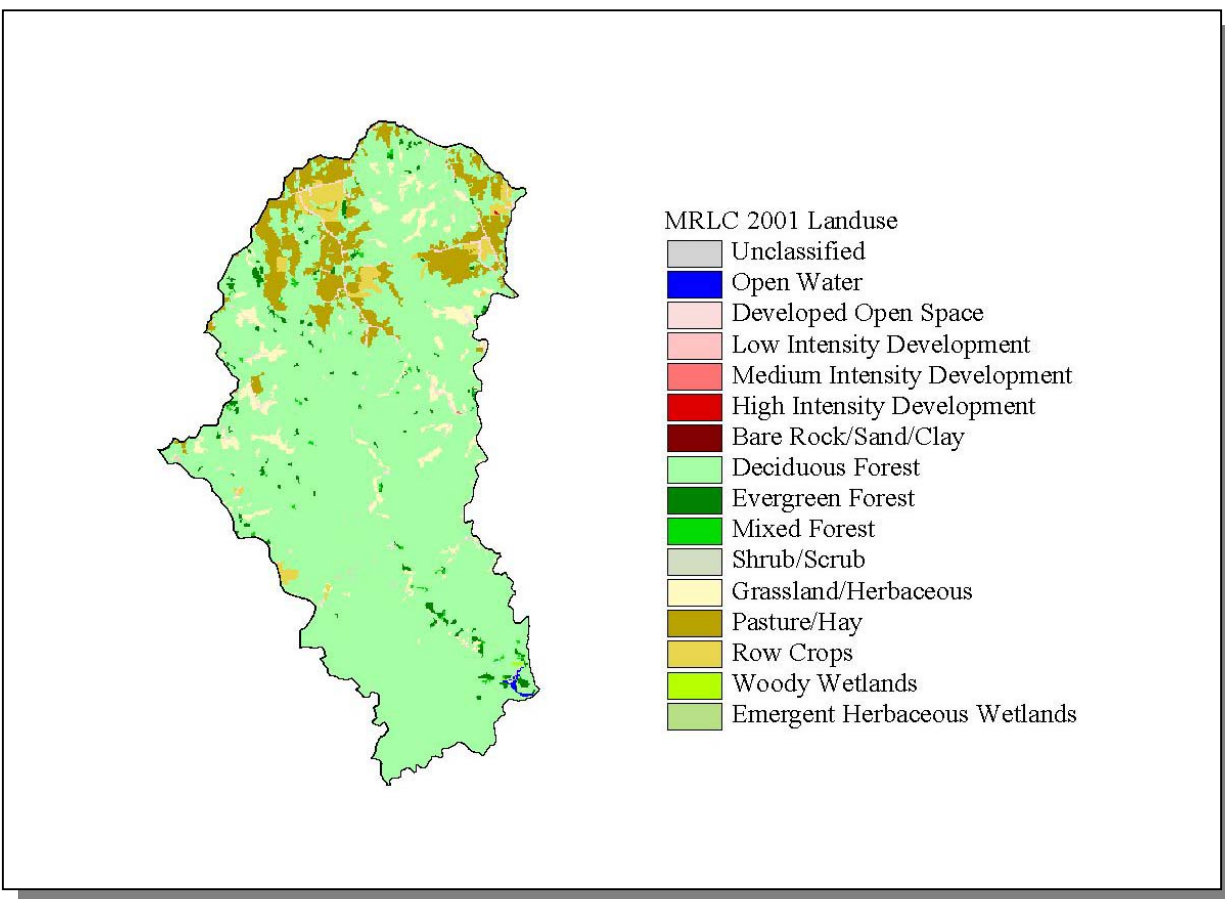


Figure 4-36. Illustration of Land Use Distribution in Subwatershed 051301060105.

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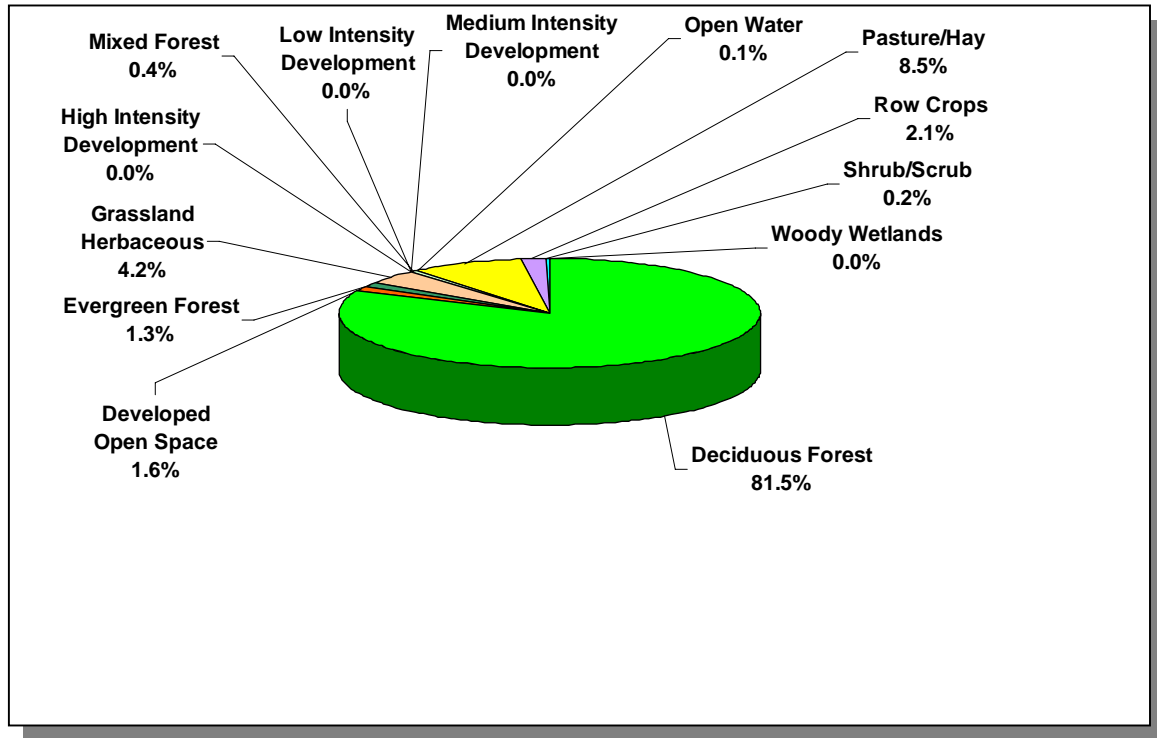


Figure 4-37. Land Use Distribution in Subwatershed 051301060105. More information is provided in Appendix IV.

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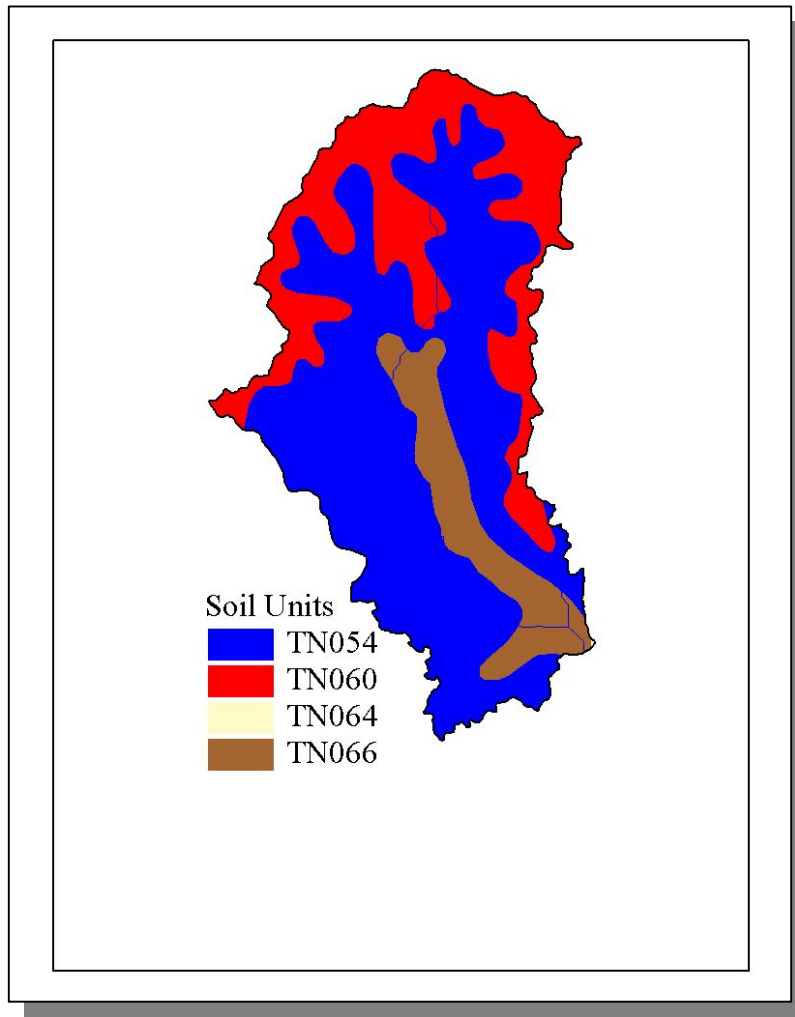


Figure 4-38. STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 051301060105.

STATSGO MAP UNIT ID	PERCENT HYDRIC	HYDROLOGIC GROUP	PERMEABILITY (in/hour)	SOIL pH	ESTIMATED SOIL TEXTURE	SOIL ERODIBILITY
TN054	0.00	C	3.04	4.84	Loam	0.32
TN060	5.00	B	1.30	5.32	Silty Loam	0.39
TN064	7.00	C	1.19	5.82	Silty Loam	0.37
TN066	0.00	B	2.62	4.75	Loam	0.28

Table 4-28. Soil Characteristics by STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 051301060105. The definition of "Hydrologic Group" is provided in Appendix IV.

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County	COUNTY POPULATION			Portion of Watershed (%)	ESTIMATED POPULATION IN WATERSHED			% Change (1990-2000)
	1990	1997	2000		1990	1997	2000	
Clay	7,238	7,311	7,976	9.32	674	681	743	10.2
Jackson	9,297	9,537	10,984	1.08	100	103	118	18.0
Total	16,535	16,848	18,960		774	784	861	11.2

Table 4-29. Population Estimates in Subwatershed 051301060105.



Figure 4-39. Location of Monitoring Sites in EPA's STORET Database in Subwatershed 051301060105. More information, including site names and locations, is provided in Appendix IV.

4.2.A.v.a. Point Source Contributions.

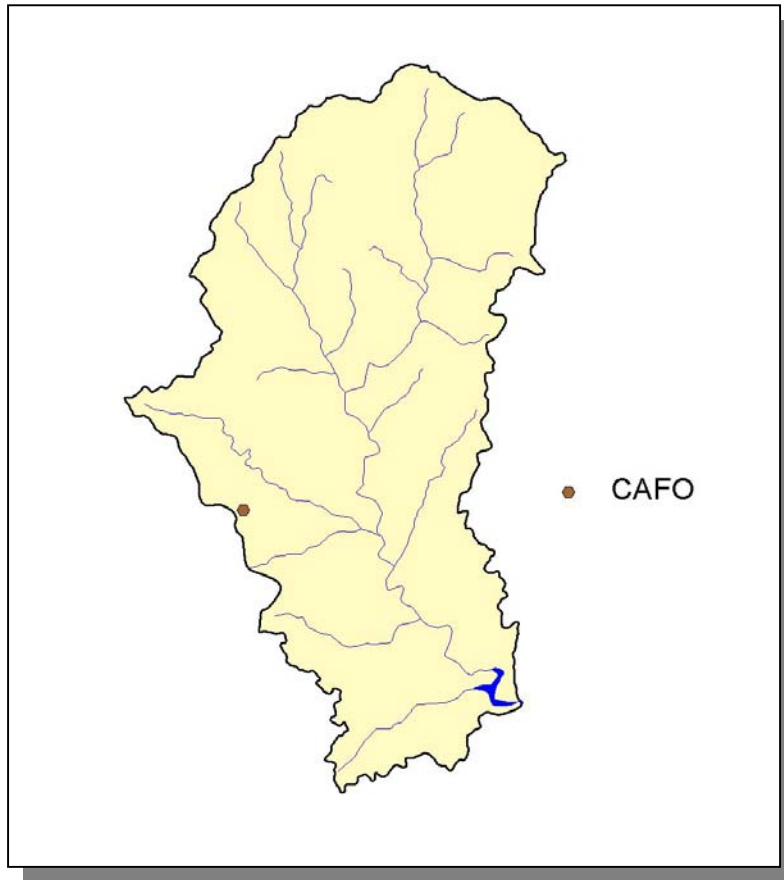


Figure 4-40. Location of Permits Issued in Subwatershed 051301060105. More information, including the names of facilities, is provided in Appendix IV.



Figure 4-41. Location of Concentrated Animal Feeding Operations (CAFO) in Subwatershed 051301060105. More information, including the names of facilities, is provided in Appendix IV.

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4.2.A.v.b. Nonpoint Source Contributions.

LIVESTOCK COUNTS			
Cattle	Chickens (Layers)	Hogs	Sheep
1,385	<5	17	<5

Table 4-30. Summary of Livestock Count Estimates in Subwatershed 051301060105. According to the 1997 Census of Agriculture (<http://www.nass.usda.gov/census/>), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older.

LIVESTOCK COUNTS						
County	Beef Cow	Cattle	Milk Cow	Chickens (Layers)	Hogs	Sheep
Clay	0	14,574	0	18	174	23
Jackson	6,962	12,086	10	727	403	39

Table 4-31. Summary of Livestock Count Estimates in Clay and Jackson Counties. According to the 1997 Census of Agriculture (<http://www.nass.usda.gov/census/>), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older.

County	INVENTORY		REMOVAL RATE	
	Forest Land (thousand acres)	Timber Land (thousand acres)	Growing Stock (million cubic feet)	Sawtimber (million board feet)
Clay	105.1	105.1	2.3	10.1
Jackson	135.9	135.9	0.9	5.1

Table 4-32. Forest Acreage and Annual Removal Rates (1987-1994) in Clay and Jackson Counties.

CROPS	TONS/ACRE/YEAR
Legumes (Pastureland)	0.41
Grass (Pastureland)	1.28
Grass (Hayland)	0.40
Legumes (Hayland)	0.17
Legumes, Grass (Hayland)	0.53
Grass, Forbs, Legumes (Mixed Pasture)	1.46
Corn (Row Crops)	21.43
Tobacco (Row Crops)	28.52
Farmsteads and Ranch Headquarters	1.53

Table 4-33. Annual Estimated Total Soil Loss in Subwatershed 051301060105.